

Atty. Docket No. DE920000090US1  
(590.160)

**REMARKS**

In the Office Action dated December 20, 2006, pending Claims 1-13 were rejected and the rejection made final. Of these claims, Claims 1, 12 and 14 are independent claims; the remaining claims are dependent claims. In response, Applicants have amended the independent claims. Applicants intend no change in the scope of the claims by the changes made by this amendment. It should be noted these amendments are not in acquiescence of the Office's position on allowability of the claims, but merely to expedite prosecution. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

**The Finality of the Rejections Should be Withdrawn**

As a preliminary matter, Applicants note the claim language which was the subject of the Section 112, second paragraph, rejection was not the subject of any prior amendments by Applicants. As such, Applicants respectfully submit the finality of the outstanding Office Action was premature. Specifically, Applicants respectfully refer the Examiner to MPEP § 706.07(a), which provides in pertinent part,

Under present practice, second or any subsequent actions on the merits shall be final, **except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claim nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.97(p).**

In the present case, the Section 112, paragraph 2, rejection was a new ground of rejection introduced by the Examiner in the outstanding office and was not necessitated

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by applicants' amendment of the claims. Accordingly, the final rejection was premature and should be withdrawn. MPEP § 706.07(d).

**Section 112 Rejection**

Claims 1 and 13 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically it is asserted Claims 1 and 13 contain limitations which lack antecedent basis. The claims in contention have been amended to address this issue.

**Section 102 Rejection**

Claims 1, 3, and 12 stand rejected under 35 USC § 102(e) as being anticipated by Smith et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Applicants' remarks set forth in the previous Amendments are equally applicable here. In the interests of brevity, however, they will not be repeated and are hereby incorporated by reference. Rather, Applicants' will now address the comments in the outstanding Office Action responding to Applicants' prior remarks.

The Office states

Cited section (i) of Smith et al. teaches of storing a communication protocol stack, i.e. considered as the claimed transmission control information, in the working memory, and the communication protocol stack 134 is loaded from the non-volatile memory 123. Cited section (ii) teaches that the communication protocol stack 134 in the working memory provides connection for the server application. The working memory meets the definition of a cache set by the Microsoft Computer Dictionary

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since communication protocol 134 is loaded from the non-volatile memory into the working memory and the working memory is accessed to provide connection for the application. Therefore, working memory may be considered as also a cache for the transmission control information.

(Office Action at 2-3)

These comments, however, are flawed as all of the components referred to therein (communication protocol stack 134, non-volatile memory 123, and working memory 124) are located on the adapter card of Smith et al. (that is, are local to the adapter). This contrasts with the present invention, as described in the specification,

The basic idea of the invention is, to use system memory as well as host adapter local memory for the transmission control information. The local memory is used like a cache, the system memory hold those work requests, which do not fit into the cache. This allows to provide the performance of implementing local memory only, but overcomes the resource restrictions of the local-memory-only approach.

\* \* \* \*

Thus, the invention represents a large step forward to a significantly increased performance in host adapter's work request handling because all transmission control information--which requires only small chip area compared to the total work request data contained in the queue pair--is available immediately where it is required: local to the host adapter. The rest of data which can be sent "through" the host adapter is stored external to the adapter/switching element because it does not carry any routing/switching information. Thus, a person skilled in the art will appreciate that the invention concept can be scaled up and down easily with a small increase or decrease of required chip area needed for the local cache memory 20--according to the actual requirements present on a given hardware and traffic situation.

(¶¶ 36 and 51)

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The independent claims as originally filed recited "a local memory being operable as a cache memory relative to [the non-local memory]". As discussed above, the Office's response to Applicants' previous arguments overlook and do not even mention the "relative to [the non-local memory]" language of the independent claims. Claim 1 has now been amended to reword this language and now recites, *inter alia*, a local memory being associated with the network coupling adapter as a cache memory for storing transmission control information associated with information stored in a system memory of the one or more computing device, such that transmission control information is cached in the local memory and information other than transmission control information is stored in the system memory. Similar language appears in the other independent claims.

Thus, it is respectfully submitted that Smith et al. clearly falls short of present invention (as defined by the independent claims) in that, at best, Smith et al. teaches all of the components (communication protocol stack 134, non-volatile memory 123, and working memory 124) as being located on the adapter card (that is, the components are local to the adapter), which is in stark contrast to the present invention. Accordingly, Applicants respectfully submit that the applied art does not anticipate the present invention because, at the very least, "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under construction." *W.L. Gore & Associates, Inc. v. Garlock*, 721 F.2d 1540, 1554 (Fed. Cir. 1983); *see also In re Marshall*, 198 U.S.P.Q. 344, 346 (C.C.P.A. 1978).

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**Section 103 Rejection**

Claims 2, 4-11 and 13 stand rejected under 35 USC § 103(a) as obvious over Smith et al. in view of Pettey et al. Reconsideration and withdrawal of the present rejections are hereby respectfully requested.

Once again, the Applicants' previous remarks are equally applicable here and are incorporated by reference. Applicants further desire to point out, however, that Pettey et al. does not overcome the deficiencies of Smith et al. as set forth above. Thus, it is respectfully submitted that this rejection should be withdrawn.

**Response After Final**

In the unlikely event the Office does not withdraw the premature final rejection, Applicants respectfully submit that the current Amendment After Final presents no new issues of patentability with respect to the independent claims and as such the current amendment may be properly entered and considered by the Examiner under 37 C.F.R. § 1.116. Furthermore, this Amendment will not result in any alteration of the prior art used to reject any dependent claim whose scope may have been changed by this Amendment in the unlikely event that the Examiner finds the independent claims to be unallowable.

The Smith et al. and Pettey et al. references are the only references the Office has applied to reject the claims in **four office actions**, including one Request for Continued Examination. This fact, coupled with the at least **four previous searches** and the Office's own explanation of the field of search,

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The field of search should extend to all probable areas relevant to the claimed subject matter and should cover the disclosed features which might reasonably be expected to be claimed.

MPEP § 904.02(a), make it clear that the current Amendment requires no further search and consideration on the part of the Examiner beyond consideration of Applicants' foregoing Remarks and as such the Amendment should be entered.

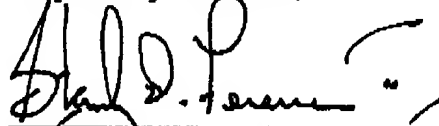
**Request for Telephone Interview**

Should there be any outstanding issues in this application, Applicants' counsel requests the courtesy of a telephone interview prior to the issuance of a further action.

**Conclusion**

In view of the foregoing, it is respectfully submitted that independent Claims 1, 12, and 13 fully distinguish over the applied art and are thus allowable. By virtue of dependence from Claim 1, it is thus also submitted that Claims 2-11 are also allowable at this juncture. Notice to the effect is hereby earnestly solicited.

Respectfully submitted,



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